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20 February 2002

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P10

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° ADMITTED IN VIRGINIA  
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\* NOT ADMITTED IN D.C.

Assistant Commissioner for Patents  
Washington, D.C. 20231

Attorney Docket: P56645

Sir:

Submitted herewith is the following patent application:

**Inventor:**

1) DONG-KYUN SEO

2) JONG-SEO CHOI

3) KYOUNG-CHEON SON

4) KYU-NAM JOO

5) SUNG-HWAN MOON

6) YOON-CHANG KIM

7) SEUNG-KWON HAN

8) BU-CHUL SIN

**Title:**

**METAL CATHODE AND INDIRECTLY HEATED CATHODE  
ASSEMBLY HAVING THE SAME**

Please find attached hereto an application for patent which includes: Specification and Abstract, Claims, original Declaration And Power of Attorney, Assignment, and a certified copy of the foreign priority document identified below:

Verified Showing of Small Entity Status: NO

Drawings: Formal drawings, 3 sheets, Figures 1A through 3B

Claim of priority under 35 U.S.C. §119: YES

\*\* The Republic Of Korea Application No. 2001-8753 filed on 21 February 2001.

**FEE (see formula below): CHECKS ARE ENCLOSED (#42063 and #42064)**

Basic Fee \$370/740 ..... \$740.00

**Additional Fees:**

Total number of claims in excess of 20: \_\_\_ times \$9/18 . \$0.00

Number of independent claims in excess of 3: \_\_\_ times \$42/84 ..... \$0.00

Multiple Dependent Claims \$140/280 ..... \$0.00

An Assignment is likewise enclosed: Recording Fee \$40 .. \$40.00

Filing Non-English specification ..... \$0.00

**TOTAL FEES FOR THE ABOVE APPLICATION ..... \$780.00**

Assistant Commissioner for Patents  
20 February 2002  
Page Two

Docket No.: P56645

**Inventor:**      1) DONG-KYUN SEO                      5) SUNG-HWAN MOON  
                         2) JONG-SEO CHOI                      6) YOON-CHANG KIM  
                         3) KYOUNG-CHEON SON                      7) SEUNG-KWON HAN  
                         4) KYU-NAM JOO                      8) BU-CHUL SIN

**Title:**            METAL CATHODE AND INDIRECTLY HEATED CATHODE  
                         ASSEMBLY HAVING THE SAME

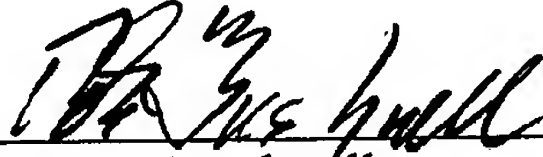
Assistant Commissioner is authorized to charge our Deposit Account No. 02-4943 for any additional charges necessary towards payment of the filing fee for the above-referenced application. Please notify the undersigned attorney of any transaction regarding our Deposit Account.

In view of the above, it is requested that this application be accorded a filing date pursuant to 37 CFR 1.53(b).

Please address all correspondence to:

Robert E. Bushnell  
1522 K Street, N.W.  
Suite 300  
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Respectfully submitted,

  
\_\_\_\_\_  
Robert E. Bushnell  
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02/20/02

J1132 U.S.

PTO/SB/17 (08-00)

Approved for use through 9/30/2000. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**FEE TRANSMITTAL**

Patent fees are subject to annual revision.

**Complete If Known**

Application Number	To be Assigned
Filing Date	20 February 2002
First Named Inventor	DONG-KYUN SEO et al.
Examiner Name	To be Assigned
Group/Art Unit	To be Assigned
Attorney Docket No.	P56645

TOTAL AMOUNT OF PAYMENT

(\$)780.00**METHOD OF PAYMENT (check one)**1. ☐

The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number: 02-4943

Deposit Account Number: \_\_\_\_\_

☐ Charge Any Additional Fee Required Under 37 C.F.R. §1.16 and 1.17.☐ Applicant claims small entity status. See 37 CFR 1.27**2. Payment Enclosed:****(CHECK #42063 & #42064)**☒ Check ☐ Credit Card ☐ Money Order ☐ Other**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	\$740.00
106	330	206	165	Design filing fee	\$
107	510	207	255	Plant filing fee	\$
108	740	208	370	Reissue filing fee	\$
114	160	214	80	Provisional filing fee	\$
SUBTOTAL (1)				(\$)	<u>740.00</u>

**2. EXTRA CLAIM FEES**

			Extra Claims	Fee from below	Fee Paid
Total claims	19	-20** =	x	=	
Independent Claims	3	-3** =	x	=	
Multiple Dependent				=	
** or number previously paid, if greater; For Reissues, see below					
Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
103	18	203	9	Claims in excess of 20	
102	84	202	42	Independent claims in excess of 3	
104	280	204	140	Multiple dependent claim, if not paid	
109	84	209	42	** Reissue independent claims over original patent	
110	18	210	9	** Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2)

(\$).00**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge-late filing fee or oath	\$
127	50	227	25	Surcharge-late provisional filing fee or cover sheet	\$
139	130	139	130	Non-English specification	\$
147	2,520	147	2,520	For filing a request for reexamination	\$
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	\$
113	1,840 *	113	1,840*	Requesting publication of SIR after Examiner action	\$
115	110	215	55	Extension for reply within first month	\$
116	400	216	200	Extension for reply within second month	\$
117	920	217	460	Extension for reply within third month	\$
118	1,440	218	720	Extension for reply within fourth month	\$
128	1,960	228	980	Extension for reply within fifth month	\$
119	320	219	160	Notice of Appeal	\$
120	320	220	160	Filing a brief in support of an appeal	\$
121	280	221	140	Request for oral hearing	\$
138	1,510	138	1,510	Petition to institute a public use proceeding	\$
140	110	240	55	Petition to revive - unavoidable	\$
141	1,280	241	640	Petition to revive - unintentional	\$
142	1,280	242	640	Utility issue fee (or reissue)	\$
143	460	243	230	Design issue fee	\$
144	620	244	310	Plant issue fee	\$
122	130	122	130	Petitions to the Commissioner	\$
123	50	123	50	Petitions related to provisional applications	\$
126	180	126	180	Submission of Information Disclosure Statement	\$
581	40	581	40	Recording each patent assignment per property (Times number of properties)	\$40.00
146	740	246	370	Filing a submission after final rejection (37 C.F.R. §1.129(a))	\$
149	740	249	370	For each additional invention to be examined (37 C.F.R. §1.129(b))	\$
Other Fee (specify) _____					\$
Other Fee (specify) _____					\$

\*\* Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

\$40.00

**SUBMITTED BY****Complete (if applicable)**

Typed or Printed Name

Robert E. Bushnell, Esq.

Reg. Number

27,774

Signature

Date

20 February 2002

Deposit Account User ID

REB/sb

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